

the Southern hemisphere also. One species seems to be identical with a tertiary fossil, *Defrancia stellata* of Goldfuss. The most striking peculiarities in so small a collection are the occurrence in it of no less than four new species of *Eschara*, and of two new (as recent) forms of *Defrancia*, both abundant generic forms in the tertiary and cretaceous formations.

CELLEPORA, *O. Fabricius*.
cervicornis, *Autor*.

ESCHARA, *Ray*.

teres, n. sp.

tridens, n. sp.

saccata, n. sp.

rosacea, n. sp.

RETEPORA, *Imperato*.

cellulosa, *Lam*.

beaniana, *King*.

IDMONEA, *Lamx*.

atlantica, *Forbes*.

HORNERA, *Lamx*.

frondiculata, *Lamx*.

DIASTOPORA, *M.-Edw*.

obelica, *Johnst*.

TUBULIPORA, *Lamarck*.

hispida, *Fleming*.

DEFRANCIA, *Bronn*.

fungiformis, n. sp.

stellata, *Goldfuss*.

Frequently the dredge came up quite full of masses of one or more of the above species. At Keilvig, in Finmark, a dredge from 100 to 160 fathoms water was quite filled with *Retepora*. The *Cellepora cervicornis* frequently formed large patches in 50 fathoms water. The *Idmonea atlantica* was very common, attached to a red weed found in the lower part of the Laminarian zone. We are indebted to Mr. Busk for the above list and notes on the Polyzoa; he has also kindly described and figured the new species, which will be published in an early Number of the 'Annals.'

XXXIV.—*Some Account of an Infant "Orang-Utan."*

By ALFRED R. WALLACE.

THIS little animal was probably not more than a month old when I obtained it by shooting its mother, with whom it fell to the ground apparently uninjured. I found out afterwards that it had then broken a leg and an arm, which however mended so rapidly, that I only noticed it a week or two afterwards by observing the hard swellings on the limbs where the irregular junction of the bone had taken place. When I first obtained it, it was toothless, but a few days afterwards it cut its two lower front teeth. I fed it with rice-water given out of a bottle with a quill in the cork, which after one or two trials it sucked very well. When however a finger was placed in its mouth it would suck at it with remarkable vigour, drawing in its little cheeks with all its might, thinking no doubt it had got hold of the

right thing at last, and wondering that all its exertions could get no milk out of it. It would persevere for a long time till at last it gave up with despair and disgust, indicated generally by a very baby-like scream.

When handled or nursed it was always quiet and contented, but when laid down alone it would invariably cry, and the first night or two was very restless. I fitted up a small box as its cradle with a mat for it to lie upon, which was changed and washed every day. I soon found it necessary to wash the little Mias as well, which appeared to have very good effect. It winced a little and made ridiculously wry faces when the cold water was poured over its head, but enjoyed the rubbing dry amazingly, and was particularly pleased at having the hair of its back, head and legs brushed afterwards, during which operation it would lie perfectly still as long as I liked to continue it. For the first day or two it clung desperately with its four hands to whatever it could lay hold of, and having once unawares caught hold of my whiskers and beard, it clutched them with its little hooked fingers cruelly tight, and I had considerable difficulty in getting free. It doubtless felt quite at home, being accustomed to cling from its birth to the long hair of its mother.

When restless it would struggle about with its hands up to catch hold of something, and might often be seen quite contented when it had some bit of rag or stick grasped in two or three of its hands. At other times it would take hold of its own feet, and latterly its constant practice was to cross its arms like a little Napoleon, and with each hand seize hold of the long hair just below its opposite shoulder. The excessive tenacity of its grasp however soon diminished. The constant and powerful exercise of the limbs in the young Mias, remaining as it does for many hours each day with the whole weight of its body supported by its four extremities from the body of its mother, must induce a development of the limbs which can hardly take place in confinement. We should therefore expect a considerable difference in the proportions of the limbs and body, between animals brought up in a state of captivity and those killed in a state of nature.

I soon found that I could feed my infant Mias with a spoon, and make its food rather more solid. I gave it soaked or chewed biscuit with a little sugar and egg, and sometimes sweet potatoes. These it liked very much, and it was a never-failing source of amusement to observe the curious changes of countenance by which it would express its approval or dislike of what was given it. It would lick its lips, draw in its cheeks, and turn up its eyes with an expression of the most supreme satisfaction when it had a mouthful particularly to its taste. On the other hand,

when its food was not sufficiently sweet or palatable, it would turn the mouthful about with its tongue for a moment as if trying to extract what flavour there was, and then push it all out between its lips. If the same food was continued, it would set up a scream and kick about violently, exactly like a baby in a passion.

After about three weeks I obtained a small Hare-lipped Monkey (*Macacus cynomolgus*), which, though young, had its first teeth, was very active, and could feed itself. I placed it in the same box with the Mias and they immediately became excellent friends, not exhibiting the least fear of each other. The little monkey would sit upon the Mias' stomach, or even on its face, with very little regard to its feelings, and after feeding would pick off what was sticking to its lips, and then pull open its mouth and put its little hand in to see if any was left inside, and would afterwards lie down across its body in whatever position was most convenient, without at all consulting the comforts of its companion. The poor little Mias would submit to all these insults with the most exemplary patience, seeming quite glad to have something warm about its body, and occasionally taking its revenge by clutching tight hold of the loose skin on the monkey's back or head, and then, when he tried to escape, holding on by the long tail as long as it could, the vigorous jumps of the monkey generally being too much for it in the end.

It was curious to observe the difference between these two. The Mias like a young baby lying on its back quite helpless, rolling lazily from side to side, stretching out its four hands into the air wishing to grasp something, but unable to guide its fingers to any particular object, and when dissatisfied opening wide its almost toothless mouth and expressing its wants by an infantine scream. The little monkey, on the other hand, in constant motion, running and jumping about wherever it pleased, examining everything with its fingers and seizing hold of the smallest objects with the greatest precision, balancing itself on the edge of the box, or running up a post and helping itself to everything eatable that came in its way. There could not be a greater contrast, and the baby Mias looked more baby-like by the comparison.

In order to give my infant a little exercise and strengthen its limbs, I contrived a kind of ladder upon which I put it to hang for a quarter of an hour at a time; but this was not much to its liking, as it could not get all four of its legs into convenient positions. It would hang for some time by two hands only, and then suddenly leaving go with one would cross it to the opposite shoulder to catch hold of its own hair, and thinking no doubt

that that would support it much better than the stick, would leave hold with the other hand and come tumbling down on to the floor, when it would immediately cross its arms and lie quite contented, for it never seemed hurt by any of its numerous tumbles. I then tried to make a kind of artificial mother for the little creature by wrapping up a piece of buffalo-skin into a bundle with the long woolly hair outside, and hung it up about a foot from the ground. This suited it much better, as it could sprawl its legs and arms about wherever it liked, and always find some hair to catch hold of, which its little fingers grasped with the greatest tenacity. But the very success of this plan led to its speedy disuse ;—it was too natural ; and the poor little creature thinking it had recovered its mother was continually trying to suck. It would pull itself up close by the strength of its arms and try everywhere for a likely place, but only succeeded in getting mouthfuls of wool, when of course it would be greatly disgusted, scream violently, and if not rescued would soon let itself fall. One day it got so much wool into its throat that I thought it would have been choked, but after much gasping it recovered, and this plan of giving it exercise had to be discontinued.

After I had had it about a month, it began to exhibit some little signs of learning to run alone. When laid upon the floor it would push itself along by its legs, or roll over, and thus make an unwieldy progression. When in its box it would lift itself up to the edge into almost an erect position, and once or twice succeeded in tumbling out. When left dirty or hungry, or anyway neglected, it would scream violently till attended to, varied by a kind of pumping noise very similar to that which is made by the adult animal. If its cries were taken no notice of, or no one was in the house, it would lie quiet, but as soon as it heard a footstep near it would recommence with great violence.

In five weeks it cut its two upper front teeth, but in all this time it had not grown the least, remaining both in dimensions and weight the same as when I first procured it. This was no doubt owing to want of milk or other equally nourishing food. Rice-water was a miserable substitute, and cocoa-nut milk, which I sometimes gave it, did not quite agree with its stomach. To this I imputed an attack of diarrhoea which the poor little animal suffered, for which I gave it a small dose of castor-oil which operated very well, and it afterwards soon became better. It was however again taken ill, and this time more seriously. The symptoms were all those of intermittent fever, accompanied with watery swellings of the feet and head. It lost all appetite for its food, and after lingering for a week a most pitiable object, died, after being in my possession nearly three months.

I much regretted the loss of my little pet, which I had at one time looked forward to bringing up to years of maturity, and which had afforded me daily amusement and pleasure by its curious ways and the inimitably ludicrous expressions of its little countenance. Could I have obtained a regular supply of milk, or better still, could I have found some animal to have given it suck, I have little doubt it might have been reared, though it would probably never have reached the dimensions of its parents. It is probable that so young an animal of this species has never been before observed by Europeans. I have therefore given this brief account of its habits, which may not be uninteresting to lovers of nature.

Dimensions of young Orang-Utan.

	ft.	in.
Length : heel to crown	1	2
—— arms extended	1	11
—— legs extended	1	7
—— of feet	0	4
—— of hands	0	3
Girth of body	0	11
—— of thigh	0	3 $\frac{3}{4}$
—— of arm	0	3 $\frac{7}{8}$
—— of head, chin to crown	1	1 $\frac{1}{4}$
Weight 3 lb. 9 oz.		

XXXV.—*On the Theory of the Fecundation of the Ovum.*

By E. CLAPARÈDE.

[Concluded from p. 311.]

WE have already seen that J. Müller, on discovering an opening in the envelope of the ova of *Holothuria*, could not avoid mentioning the analogy of this canal with the micropyle of the Phanerogamous plants, so naturally did this comparison occur to the mind. Keber in his turn adopted the name of *micropyle* in treating of the ova of the *Naiades*, and we may now say that both the name and the analogy are sanctioned by science. The analogies between the modes of fecundation in the vegetable and animal kingdoms are indeed of more than one kind. What, in fact, are the phytosperms of the Cryptogamia,—for an exact knowledge of which we are particularly indebted to Nägeli and Leszczye-Suminski,—unless they are the spermatozoa of these plants? Is it not a very remarkable fact, that in both cases fecundation should be connected with particles endowed with motion, which at first sight might be taken for animated creatures? Prévost and Dumas, Siebold, Müller, Wagner, Kölliker, Quatrefages, Bischoff, Leuckart, &c., have more especially